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Request IR-1:

Please provide a summary of the fish mortality events that occurred in 2022 and 2023, including:

(a) Estimated fish mortality volumes;

(b) Known or suspected contributing environmental and hydraulic conditions; and

(c) Any findings or observations from internal reviews or third-party investigations.

Response IR-1:

(a) Fish mortalities resulting from the 2022 and 2023 events were not enumerated. Estimates place the order of magnitude of the 2022 mortality event as several tens of thousands of fish, and the 2023 event in the order of magnitude of several thousand fish.

(b) The root cause of both events is understood by NS Power to be stranding of fish due to low water levels. Contributing factors included water level fluctuations due to tidal influence, lack of access in or out of the tidal pool throughout the tidal range, blockages of entry/exit points by other non-NS Power entities, and overall water quality (dissolved oxygen and temperature).

(c) After the 2023 mortality event, NS Power completed bathymetry in the tidal pool, a topographic survey of lands directly adjacent to and/or influencing the tidal pool, a wetland and rare species delineation, and an archaeological resource impact assessment and shovel testing programme. It was confirmed through these studies that NS Power controls the lands through which fish enter and exit the tidal pool; bathymetry confirmed that there are areas within the tidal pool that fish stranding can occur during low tide. NS Power contracted a third-party engineering consultant and qualified fish passage professional to

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1 assess and validate the existing conditions of the tidal pool as part of the design alternatives
2 evaluation, as referenced in NS Power’s application. Studies also confirmed that the tidal
3 pool was wetland habitat and the alternatives considered avoidance of impacts to wetland
4 habitat to the extent possible. The archaeological program informed areas where avoidance
5 or further archaeological monitoring would be required for all alternatives being
6 considered.

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Request IR-2:

Were there any fish mortality, fish distress, stranding, or similar incidents observed during the 2024 and 2025 migration seasons while temporary mitigation measures were in place?

Response IR-2:

No. The temporary mitigation measures were successful at preventing fish mortality and stranding within the tidally influenced pool during the 2024 and 2025 migration seasons. Temporary measures included the use of diesel trash pumps to pump supplemental water into the tidal pool during low tide and blocking off of the northern channel with a temporary cofferdam to sustain increased water levels in the pool and limit flow in and out of pool to the southern channel. This is not an acceptable permanent solution to mitigating mortality risk for the following reasons:

- Ongoing use of diesel pumps creates an increased risk to environment as they are susceptible to releases to the surrounding environment. Placement requires proximity to water which further increases this risk.
- Ongoing use of diesel pumps creates an increased risk of failure of mitigation measures. Pumps are prone to mechanical breakdown and vandalism resulting in breakdown.
- Ongoing use of diesel pumps requires continuous monitoring and maintenance by Hydro Operations staff, as well as refueling and/or onsite fuel storage which further increases environmental risk.
- Temporary sandbag cofferdams create an increased risk to environment due to release of material to the watercourse should bags become damaged or vandalized.

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- 1 • Temporary pumping measures do not fully address deficiencies identified through data
2 collected in 2023 (bathymetry and legal land survey). Remedial works on the artificial
3 berm and southern outlet structure are still required to further mitigate mortality risk.

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Request IR-3:

- (a) Please provide a copy of any directives, orders, formal correspondence, or written expectations issued by the Department of Fisheries and Oceans (DFO) following the 2022 and 2023 fish mortality events, including any direction related to temporary mitigation measures and permanent remediation requirements; and**
- (b) Please also confirm whether any additional directives, orders, or formal feedback have been issued by DFO subsequent to the 2023 event, including during the 2024 and 2025 migration seasons.**

Response IR-3:

- (a) No formal directives, orders or advice were issued to NS Power by DFO following the 2022 and 2023 mortality events. NS Power worked collaboratively with DFO after the 2023 event to assess tidal pool conditions, implement temporary mitigation measures, and develop a plan to identify and implement appropriate remedial measures to address the ongoing fish mortality risk.**
- (b) A letter of advice (LoA) was issued by DFO in February 2024 in response to their review of NS Power's proposal to complete design option A-2 as recommended in the alternatives evaluation. A new LoA was issued by DFO in November 2025 in response to their review of NS Power's watercourse and wetland alteration applications to complete the remedial works following design option A-2 to NS Department of Environment and Climate Change (NSECC) for requirements in accordance with the *Fisheries Act*. No other formal communications from DFO have been received.**

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Request IR-4:

Please explain in further detail why Option A-2 was determined to represent the preferred alternative, including:

- (a) How NS Power assessed the balance between environmental effectiveness, constructability, long-term operational requirements, and cost;**
- (b) Whether any lower-cost alternatives were determined to provide acceptable mitigation outcomes; and**
- (c) How the selected option minimizes future fish mortality risk relative to the other options considered.**

Response IR-4:

(a) Section 4.0 of the Tusket Tidal Pond – Concept Design Report (please refer to Attachment 1 of the Application) provided an evaluation of options, which identified Options A-1 and A-2 as having the greatest number of favourable design attributes among all alternatives considered. Within that assessment, the risk of stranding, constructability, footprint, sediment runoff, long term maintenance, and capital cost for each of the options were compared against all of the other options.

Upon review of that analysis, NS Power sought feedback on each of the options from the Mi'kmaq of Nova Scotia, Fisheries and Oceans Canada (DFO), and the local commercial gaspereau harvesters. NS Power also commissioned a wetland and vegetation survey of the tidally influenced pool area, prepared project execution schedules that incorporated the time for seeking all of the environmental permits required for each of the options, and the results of a review of the wetland and vegetation survey completed by the Kwilmu'kw

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1 Maw-klusuaqn (KMK) to identify any culturally significant flora and fauna, as well as
2 species-at-risk, within the project area.

3
4 With this additional information and through additional discussions with the Mi'kmaq of
5 Nova Scotia, NS Power eliminated the options that would directly impact wetlands and
6 species at risk habitat (Options P-2 and P-3). Options A-4, A-5, and P-1 were eliminated
7 based on anticipated construction costs, increased maintenance requirements, and
8 increased monitoring requirements to ensure the new structures were operating as
9 designed. Option A-1 was eliminated, as it still contained the risk that there could be
10 insufficient water depths within the pool at low, low tides to support any fish being trapped
11 in the tidally influenced pool. Finally, Option A-2 was selected as the preferred alternative,
12 as it had the lowest potential for archaeological and wetlands impact among the remaining
13 alternatives.

14
15 (b) No lower-cost alternatives were determined to provide acceptable mitigation outcomes.

16
17 (c) All of the other options considered, except Option A-1 and the temporary mitigation
18 measures implemented in 2024 and 2025, have a lower fish mortality risk relative to the
19 selected Option A-2, however, the other options have greater archaeological risk, wetland
20 risks, harm to fish habitat risk, harm to species-at-risk risks, and environmental permitting
21 risks. Option A-2 still has a low fish mortality risk and the differences in mortality risk
22 between the various options considered is insufficient to outweigh the increase to all of the
23 other risk categories.

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Request IR-5:

Please describe the anticipated long-term operational and maintenance requirements associated with the selected option, including:

(a) Inspection requirements;

(b) Sediment or vegetation management expectations;

(c) Anticipated maintenance of the timber crib structure and piping system; monitoring requirements during migration season; and

(d) Whether the project is expected to materially reduce ongoing manual intervention requirements compared to the temporary pumping arrangement.

Response IR-5:

(a) The timber crib structure and piping system are visually inspected on a weekly basis as a regular part of the Hydro, Wind & Solar staff site checks of the Tusket Hydro System.

(b) The timber crib structure is expected to operate free from sediment or vegetation. Any sediment or vegetation deposits shall be identified during the weekly inspections and removal activities planned for as soon as is practicable.

(c) The expected useful life of the timber crib structure is 25 years. Therefore, significant maintenance of the structure is not anticipated before that point. However, it is anticipated that the structure will have to be kept free of debris and vegetation, removing those materials when identified.

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1 The expected useful life of the piping system is between 15 and 30 years, as the pipe is
2 located in coastal conditions. No significant maintenance is anticipated before that point.
3 However, minor maintenance activities, such as lubrication, will occur annually, when the
4 valve position is changed.

5
6 The presence of fish within the tidally influenced pool will be monitored on a weekly basis
7 as a regular part of the Hydro, Wind & Solar staff site checks of the Tusket Hydro System.
8 There is no expectation that NS Power will need to count the fish entering and exiting the
9 timber crib structure.

- 10
11 (d) Yes. The project is expected to materially reduce ongoing manual intervention
12 requirements compared to the temporary pumping arrangement, as Hydro, Wind & Solar
13 staff will not have to operate and maintain portable diesel pumps on the site. The valve on
14 the water supply system can be opened at the start of the upstream fish migration season
15 and remain in the open position until the upstream fish migration is completed, requiring
16 no other manual intervention. The diesel pumps required Hydro, Wind, & Solar staff to set
17 up the pumps and piping at the start of the upstream fish passage migration season, remove
18 the pumps and piping at the end of the migration season, track tide times, coordinate staff
19 to be on site to start and stop the diesel pumps depending on the position of the tide, refuel
20 the pumps, maintain the condition and position of the piping, repair any damage to the
21 pump and piping system, and prevent theft/vandalism of the pumping system.

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Request IR-6:

Please provide additional details regarding the increase in forecast project costs from approximately \$1.32 million to \$1.76 million, including:

- (a) A breakdown of the principal cost drivers contributing to the variance;**
- (b) The rationale for changing the source location of the 6 cfs water supply;**
- (c) The nature of the archaeological or permitting concerns identified with the original concept;**
- (d) The extent to which contractor pricing differed from preliminary estimates; and**
- (e) Whether further material cost escalation risk remains.**

Response IR-6:

The project estimate of \$1.32 million listed in the 2026 ACE Plan was prepared in October 2025 and reflected high level construction cost estimates that were based on engineering consulting estimates prior to an RFP process. The submitted application amount of \$1.76 million was based on the costs proposed by the selected construction services RFP.

- (a) The main drivers contributing to the variance between the 2026 ACE Plan estimate and the submitted application are the updated materials and contract costs received in the RFP (\$345k) and the breaking out of a contingency amount (\$200k). These are partially offset by lower costs related to internal labour and Mi'kmaq engagement.**
- (b) Changing the source of the 6 cfs water supply from the conceptual design to the detailed design was based on a recommendation from the design engineering consultant after a more**

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1 detailed review of the site including the Fourth Bay of the Tusket Powerhouse. The design
2 engineering consultant noted that shifting the location of the 6 cfs water supply would
3 simplify construction, significantly reduce the amount of excavation within an
4 archaeologically sensitive area, and improve pipe inspection capabilities, as more of the
5 pipe would be visible for regular inspection.
6

7 (c) Permitting concerns did not change from the original concept design to detailed design.
8 Permitting concerns included the need to complete work below the ordinary high-water
9 mark on Crown lands, complete work within a watercourse, complete work near habitat
10 for rare species, and complete work within an identified wetland. Archaeological concerns
11 decreased from the conceptual design to detailed design with the relocation of the 6 cfs
12 piping system. Based on an archaeological assessment and shovel testing program
13 completed at the project site, it was determined that the location of the piping system in the
14 conceptual design was determined to be within an area of high archaeological potential for
15 archaeological resources related to Mi'kmaq use and occupation. Avoidance was
16 recommended wherever possible and, if avoidance was not possible, additional shovel
17 testing and monitoring by a professional archaeologist during excavation was
18 recommended.
19

20 (d) Please refer to part (a).
21

22 (e) No. All materials required to execute the project have been purchased.

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Request IR-7:

Please confirm whether DFO, Indigenous communities, or other stakeholders expressed any concerns or preferences regarding the alternative mitigation options evaluated in the Wood Canada report, including:

(a) Options involving greater restriction of tidal exchange;

(b) Options involving infilling or substantial alteration of the wetland area; and

(c) Any concerns related to fish passage, habitat alteration, or long-term ecological impacts.

Response IR-7:

(a) Greater restriction of tidal exchange was not expressed as a concern or preference by DFO, the Mi'kmaq or other stakeholder groups.

(b) Options involving substantial alteration of the wetland area was of concern to the Mi'kmaq of Nova Scotia. Preference was given to options that avoided significant impact to wetland habitat.

(c) Fisheries and Oceans Canada (DFO), the Mi'kmaq of Nova Scotia and representatives of the Yarmouth/Shelburne commercial gaspereau fishery expressed concerns related to fish passage, habitat alteration, and long-term ecological impacts. There was no preference given by DFO, the Mi'kmaq, or commercial harvesters to any alternative from these respects.

REDACTED

Request IR-8:

Please provide a high-level summary of the procurement process undertaken for the design and construction components of the project, including:

(a) The procurement method utilized;

(b) Whether the process was competitive;

(c) The number of proponents participating; and

(d) The primary factors considered in vendor selection.

Response IR-8:

(a) Engineering design – Request for quotation (RFQ)

Construction – Request for proposal (RFP)

(b) Engineering design – Yes

Construction – Yes

(c) Engineering design – 8 invitations issued; 5 intent to respond forms completed; 2 proposals received

Construction – 5 invitations issued; 3 intent to respond forms completed; 2 proposals received

(d) Proposals received for both scopes of work were evaluated based on corporate risk with pass/fail criteria and on commercial/technical criteria with a 100-point scoring assessment.

The corporate risk was assessed based on the proponents' insurance/certifications and their

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ISNetworkworld company grade. The commercial/technical criteria for the engineering design were assessed based on the following criteria:

- Pricing ([REDACTED] pts)
- Speed and efficiency of implementation (or project) plan, availability and delivery ([REDACTED] pts)
- Experience in the industry and relevant and specific expertise and competence of proposed project team / key personnel ([REDACTED] pts)
- Understanding of Specification and ability to provide an innovative and acceptable solution ([REDACTED] pts)
- Adherence to RFQ Requirements ([REDACTED] pts)

The commercial/technical criteria for the construction work were assessed based on the following criteria:

- Pricing ([REDACTED] pts)
- Speed and efficiency of implementation (or project) plan, availability and delivery ([REDACTED] pts)
- Experience in the industry and relevant and specific expertise and competence of proposed project team/key personnel ([REDACTED] pts)
- Understanding of Specification and ability to provide an innovative and acceptable solution ([REDACTED] pts)
- Safety Plans, Historical Safety Performance ([REDACTED] pts)

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Request IR-9:

Please provide additional detail regarding the “First Nations Commitment” costs included within the project estimate, including:

(a) The nature and purpose of the commitment;

(b) Whether the amounts relate to consultation, monitoring, procurement participation, cultural or archaeological considerations, environmental involvement, or other activities;

(c) Whether these commitments arise from regulatory requirements, NS Power policy, or negotiated arrangements; and

(d) Whether additional First Nations-related costs are anticipated over the life of the project.

Response IR-9:

(a) The “First Nations Commitment” costs covered the engagement NS Power conducted with the Mi’kmaq Working Group that has been established for initiatives on the Tusket Hydro System. Recognizing the cultural significance of the area, NS Power has an established Working Group with representatives from Wasoqopa’q (formerly Acadia) First Nation, and Kwilmu’kw Maw-klusuaqn (KMK), including Mi’kmaw elders and Wasoqopa’q First Nation’s elected council members. Representatives from Sipekne’katik First Nation have also participated in Working Group discussions and community-specific discussions. The goals of the Working Group are to identify areas of concern to the Mi’kmaw communities, work to resolve the identified concerns, solicit information from Mi’kmaw elders regarding the project site, establish protocols in the event that archaeological resources are identified

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1 during construction, and communicate project information to the larger Mi'kmaw
2 community.

3
4 Through this engagement process, NS Power and the Working Group had discussions
5 regarding protection of potential archaeological resources, fish, fish habitat, wetlands,
6 species at risk, species of cultural significance at the project site, the construction schedule,
7 and the anticipated environmental permits required to construct the project. The Working
8 Group reviewed and discussed all the options presented in the Wood Tusket Tidal Pond –
9 Concept Design Report (included as Appendix 1 of the Application), the results of the
10 wetland and vegetation surveys, and the results of the Archaeological Resource Impact
11 Assessment for the Tusket Powerhouse Tidal Pool.

12
13 (b) The amounts relate to engagement activities and support Crown consultation.

14
15 (c) Early and ongoing engagement with the Mi'kmaq of Nova Scotia is important to NS Power,
16 and part of the project management process. NS Power's engagement also supports Crown
17 consultation and often streamlines that process by hearing questions and concerns directly,
18 collaborating on mitigating and/or accommodating those concerns, sharing additional
19 information and answering questions during the project development process.

20
21 (d) No additional First Nations-related costs are anticipated over the life of the project.